

United States Patent and Trademark Office

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/644,143 08/20/2003		Connie Sanchez	5432/1J951US4	6480	
7278	7590	07/30/2004		EXAMINER	
DARBY &		P.C.	KRASS, FREDERICK F		
NEW YORK, NY 10150-5257				ART UNIT	PAPER NUMBER
				1614	

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/644,143	SANCHEZ ET AL.					
Office Action Summary	Examiner	Art Unit					
	Frederick F. Krass	1614					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by state that the period for reply will, by state that the material patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply be tir reply within the statutory minimum of thirty (30) day od will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on							
/ ·	<u> </u>						
3) Since this application is in condition for allow	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
 4) Claim(s) 2-5, 8 and 15-25 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 2-5, 8 and 15-25 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 							
Application Papers							
9) The specification is objected to by the Exam 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to t Replacement drawing sheet(s) including the corr 11) The oath or declaration is objected to by the	accepted or b) objected to by the the drawing(s) be held in abeyance. Se rection is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/021,126. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 11-7-03: 11-18-03.	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal 6) Other:	y (PTO-413) Pate Patent Application (PTO-152)					

Art Unit: 1614

Obviousness Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 1) Claims 2-5, 8 and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evenden et al (USP 6,184,219).

Patentees disclose the administration of escitalopram (see col. 2, lines 29-32) in unit dosage form such as capsules and tablets (see the passage spanning col. 3, line 40 to col. 4, lines 24) to patients

Art Unit: 1614

having various serotonin (5-hydroxytryptamine) mediated disorders, including those having post-traumatic stress disorder (col. 5, line 12). The escitalopram may be administered as an oxalate salt (col. 2, line 39).

The prior art is also not anticipatory insofar as some "picking and choosing" from varied and alternative conditions disclosed at col. 5, lines 5-14 is required to arrive at the instantly claimed subject matter. It would have been obvious, however, to have selected post-traumatic stress disorder from that list, motivated by the prior art's unambiguous disclosure of that specific condition.

Regarding the specific dosage ranges of instant claims 3-5, it is noted that the prior art does not specifically disclose them, instead teaching the use of a broad range from 0.01 to 100mg/kg at col. 4, lines 47-60. It is well-settled, however, that it is obvious to experiment within disclosed ranges, using no more than routine experimentation, to determine optimal/workable conditions. As stated by the federal circuit, "the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages." In re Peterson, 315 F.3d 1325 (C.A. Fed. 2003). Accordingly, it would have been obvious to have experimented within the disclosed prior art dosage ranges using no more than routine experimentation to arrive at the particular dosage ranges of instant claims 3-5, consonant with the reasoning of such precedent.

2) Claims 2-5, 8, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al (USP 6,169,105).

The prior art discloses the use of racemic citalopram to treat, *inter alia*, post-traumatic stress disorder (a.k.a. post-traumatic "syndrome": see the last line of col. 13). Administration is in unit dosage form, such as capsules and tablets (col. 9, lines 23 et seq), in dosages ranging from 5 to 50mg/day, and preferably 10 to 30mg/day (col. 6, lines 59 and 60). The reference differs from the instant claims insofar as it does not specify the particular isolated enantiomer escitalopram.

It is well-settled, however, that where a racemate is disclosed, it is generally obvious to use the separated isomers constituting it. As legal authority in this case the examiner cites *In re Adamson and*

Art Unit: 1614

Duffin 125 USPQ 233. The case sets forth the requirements of patentability with regard to stereoisomers as follows:

- a) The existence of a racemate is, in and of itself, sufficient to render obvious any individual stereoisomers contained within; no express suggestion of isomer separation is needed. See the first paragraph on page 235.
- b) One skilled in the art expects that individual stereoisomers will differ significantly in physiological/pharmacological activity and toxicity, because living systems are chiral and thus preferentially process certain stereochemical configurations over others. See page 234, the third full paragraph and page 235, the fifth full paragraph on the page.

Accordingly, it would have been obvious to have separated escitalopram from the racemic mixtures of the prior art, and to have used it for the treatment of post-traumatic stress disorder as disclosed therein, consonant with the reasoning of such precedent.

3) Claims 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al (USP 6,169,105) in view of Boegesoe et al (USP 4,943,590).

The primary reference, and the motivation for using escitalopram based on that reference, is discussed in subsection "2)" above. That reference differs from the instant claims insofar as it does not specifically disclose an oxalate salt of citalopram. It does, however, state at col. 6, lines 37-47 that conventional salts may be employed. The working examples of the patent use the hydrochloric acid salt of citalopram, rather than citalopram oxalate.

The secondary reference teaches that it is well-known in the art to use escitalopram in the form of various salts, including hydrochloric and oxalate. See col. 1, lines 29-51. It differs from the instant claims insofar as it that, although it teaches that escitalopram is a serotonin uptake inhibitor (col. 2, lines 38-40), it does not specifically disclose treating post-traumatic stress disorder.

Art Unit: 1614

It would have been obvious to have used the oxalic acid salt in place of the hydrochloric acid salt of the primary reference, motivated by the reasonable expectation of equivalent function provided by the secondary reference. There are many sound technical reasons which would motivate the selection of one equivalent salt over another, e.g. to provide an active agent having optimal solubility and/or compatibility with a given particular desired formulation.

4) Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boegesoe et al (USP 4,943,590) in view of Wong et al (USP 6,169,105).

The primary reference teaches that escitalopram is a serotonin (5-HT) uptake inhibitor (col. 2, lines 38-40), and thus useful for treating conditions such as depression and obesity (col. 1, lines 25-27). The escitalopram may be administered as an oxalate salt (col. 1, line 42), in unit dosage form (such as tablets and capsules) in amounts ranging from 5 to 50 mg (col. 8, lines 55-66). The reference differs from the instant claims, however, insofar as it does not specifically disclose post-traumatic stress disorder.

The secondary reference teaches what is well-known in the art, namely that agents which increase the availability of serotonin (col. 1, lines 31-55) are useful for the treatment of a variety of serotonin-mediated affective disorders, including depression, obesity and post-traumatic stress disorder (see the last line of col. 13). The prior art differs from the instant claims insofar as it discloses racemic citalopram (see col. 6, lines 59 and 60, for example), and also insofar as it requires the presence of a second active agent (i.e. a potentiator).

It would have been obvious to have used the serotonin reuptake inhibitor escitalopram as the sole active agent to treat post-traumatic stress disorder, as well as depression and obesity as disclosed by the primary reference, motivated by the understanding, ansing from sound scientific reasoning, that all are serotonin-related disorders and thus would be responsive to therapy with a known serotonin reuptake inhibitor as taught by the secondary reference.

Art Unit: 1614

Provisional Statutory Double Patenting Rejection

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim 8 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 8 of copending Application No. 10/021,126. This is a <u>provisional</u> double patenting rejection since the conflicting claims have not in fact been patented.

Provisional Obviousness-Type Double Patenting Rejection

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Omum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2-5 and 15-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of copending Application No. 10/021,126. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are clearly coextensive in scope.

Art Unit: 1614

The conflicting claims are generic to the instant claims, reciting "neurotic disorders" broadly, of which post-traumatic stress disorder is an example. The conflicting specification defines "neurotic disorders" as follows at page 2, lines 20-24:

Throughout this specification and the claims the term neurotic disorders is used to designate a group of mental disorders, including anxiety states, in particular generalized anxiety disorder and social anxiety disorder, post-traumatic stress disorder...

Accordingly, given this definition, it would have been obvious to one of ordinary skill in the art that the generic term "neurotic disorders" in the conflicting claims included the instantly claimed species, post-traumatic stress disorder.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick F. Krass whose telephone number is 571-272-0580. The examiner's schedule is as follows:

Monday: 10:30AM- 7PM; Tuesday: 10:30AM - 7PM;

Wednesday: off;

Thursday: 10:30AM- 7PM; and

Friday: 10:30AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Christopher Low can be reached at 571-272-0951. The fax phone number for the organization where this
application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

Art Unit: 1614

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frederick Krass Primary Examiner Art Unit 1614